IN THE CLAIMS:

Please amend the claims as follows.

Claim 1 (Currently Amended): A display device including a display panel, wherein each field of an image signal is divided into a plurality of subfields, the display panel includes a plurality of pixel cells for each pixel, and grayscale display is performed by selectively causing emission in the pixel cells based on the image signal for each of the subfields, the display device comprising:

a brightness frequency data circuit for generating brightness frequency data indicating a number of pixels at each of the same brightnesses distribution for each field of the image signal;

a controller for adjusting, for each of at least two brightness regions for each field of the image signal, the number of subfields at each brightness within each brightness region, based on the brightness frequency data of the brightness concerned; and

a multi-grayscale processing circuit for two-dimensional error diffusion processing or two-dimensional dither processing on the image signal.

Claim 2 (Original): The display device according to Claim 1, wherein the controller increases the number of the subfields used for the brightness region when a number indicated by the brightness frequency data is larger than a predetermined value.

Claim 3 (Original): The display device according to Claim 1, wherein the greater a number of the subfields used for the brightness region, the more the controller shortens a period of emission of the pixel cells performed in each subfield.

Claim 4 (Original): A display device including a display panel, wherein each field of an image signal is divided into a plurality of subfields, the display panel includes a plurality of pixel cells for each pixel, and grayscale display is performed by causing emission in the pixel cells of the display panel, in each of the subfields, based on pixel data of the pixels derived from the image signal, the display device comprising:

a brightness frequency data circuit for generating brightness frequency data indicating a number of pixels at each of the same brightnesses in a brightness distribution for each field of the image signal;

a logarithmic conversion circuit for performing logarithmic conversion processing on the brightness frequency data and generating logarithmic-converted brightness frequency data;

a clipping circuit for generating level-limited brightness frequency data, by converting the logarithmic-converted brightness frequency data into a prescribed upper limit when the logarithmic-converted brightness frequency data exceeds the prescribed upper limit, and by converting the logarithmic-converted brightness frequency data into a prescribed lower limit when the logarithmic-converted brightness frequency data is smaller than the prescribed lower limit;

a cumulative brightness frequency data circuit for obtaining cumulative brightness frequency data corresponding to each brightness level, by accumulating the level-limited

brightness frequency data of each brightness level, in the order of increasing or of decreasing brightness levels;

a delimiter value generation circuit for determining a delimiter value for each neighboring subfields, based on the cumulative brightness frequency data; and,

a driving controller for grayscale driving of the pixel cells through each of the subfields, which are set using the delimiter values.

Claim 5 (Original): The display device according to Claim 4, wherein the driving controller includes:

an averaging circuit for performing cyclic low-pass filtering processing on the delimiter value for each subfield generated based on the image signal, and using the filtered delimiter value as an averaged delimiter value; and,

a brightness level modification unit for modifying brightness levels expressed by the pixel data, using a conversion characteristic based on the averaged delimiter values.

Claim 6 (Original): The display device according to Claim 4, wherein the clipping circuit sets the upper limit such that a spacing between neighboring averaged delimiter values is not more than a prescribed spacing, and sets each of the average values of the logarithmic-converted brightness frequency data as the lower limit.